



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,749	10/23/2003	Gene Carriere	14492	4314

293 7590 03/21/2005

Ralph A. Dowell of DOWELL & DOWELL P.C.
2111 Eisenhower Ave.
Suite 406
Alexandria, VA 22314

EXAMINER


THOMPSON, KENNETH L

ART UNIT	PAPER NUMBER
----------	--------------

3672

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<div style="text-align: center;">  Office Action Summary </div>	Application No. 10/690,749	Applicant(s) CARRIERE ET AL.	
	Examiner Kenn Thompson	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☒ Claim(s) 31-36 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/30/04; 10/23/03</u> | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input type="checkbox"/> Other: ____ |
|---|--|

DETAILED ACTION***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the pontoon, threaded engagement element, pivotal engagement element, threaded bottom hole assembly elements, telescoping lubricator and blowout preventer hanger must be shown or the features canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 6, 21, 31-36 are objected to because of the following informalities:

The recitation "rotational" in claim 6, lines 5 and 9 should be changed to "threaded".

Claims 21 and 33 have similar recitations.

The recitation "and/or" in claim 31, lines 37 and 38 renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. Claims 35 and 36 have a similar recitation. Claims 32-34 depend from claim 31 and are likewise objected to.

Appropriate correction is required.

Specification

The disclosure is objected to because of the following informalities:

On page 10, lines 7-20; it is unclear how the elevators are capable of performing as described, in view of figure 5 which shows the elevator, element 64, as being part of the link attached to the top drive. Since claims 6, 21 and 33 are directed toward the function of the elevators the claims are not sufficiently enabled.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15, 17-29, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilderman, U.S. 3,734,210 in view of Andreychuk, U.S. 6,003,598.

As to claims 1, 2, 5, 8-11, 15, 17, 20, 24, 26, 28 and 29, Wilderman discloses a drilling unit having a wheeled carrier base (12), a mast (26), rotary table (56), a winch (40), tilt control means (47), retractable stabilizing legs (33) and a top drive (36) slidably mounted on the mast. Wilderman discloses tubing handler (30) mounted on the mast selectively transposed between a first position in line with the mast, to a second position in out of line with the mast (col. 5, lines 21-25) to accommodate manipulation and assembly of downhole equipment by the top drive. Wilderman does not disclose a coiled tubing injector. Andreychuk teaches use of a coiled tubing injector (70) to allow for continuous coil tubing drilling (col. 2, lines 6-11). It would have been obvious to one having ordinary skill in the art at the time of the invention to arrange for the tubing handler disclosed by Wilderman to be a coil tubing injector; as taught by Andreychuk to allow for continuous drilling which will lower expenses and save time as opposed to conventional pipe drilling.

As to claims 3 and 18, Andreychuk teaches use of a coiled tubing injector (70) being in a fixed position (as determined by 46) along the length of the mast (40; the claim does not require the injector to be axially fixed to the mast).

As to claims 4 and 19, Andreychuk teaches use of the coiled tubing injector (70) being mounted on the mast by means of rails (78) mounted substantially perpendicular to the mast, a dolly (72) mounted on the rails for linear movement along the rails; and the coiled tubing injector mounted on the dolly.

As to claims 6 and 21, as best understood by the Examiner, Wilderman discloses a threaded engagement element (42) and pivotal engagement element to permit engagement of

downhole equipment which is not in line with the mast, wherein the pivotal engagement element is adapted to allow downhole equipment to pass therethrough to engage the rotational engagement element when the downhole equipment is in line with the mast, and upward force is exerted on the downhole equipment.

As to claims 7 and 22, Wilderman discloses the rig (10). Wilderman does not disclose the rig having a storage reel spindle (89) mounted on the base (22) for accommodating rotational mounting of a coiled tubing storage reel (82); a storage reel drive (92) mounted on the base for rotating the coiled tubing storage reel; and a guidance system (94) for guiding coiled tubing off of, and on to the coiled tubing storage reel. Andreychuk teaches use of a storage reel spindle (89) mounted on the base (22) for accommodating rotational mounting of a coiled tubing storage reel (82); a storage reel drive (92) mounted on the base for rotating the coiled tubing storage reel; and a guidance system (94) for guiding coiled tubing off of, and on to the coiled tubing storage reel to hold various sizes of coiled tubing which allow for continuous coil tubing drilling (col. 2, lines 6-11). It would have been obvious to one having ordinary skill in the art at the time of the invention to arrange for the rig disclosed by Wilderman to have a storage reel assembly; as taught by Andreychuk to allow for continuous drilling which will lower expenses and save time as opposed to conventional pipe drilling.

As to claims 10 and 25, Wilderman discloses a tilt control means (50,52,44) controlling the mast (26) so as to move from the transportation position (fig 3) to the operating position (fig 1).

As to claims 12 and 27, Wilderman discloses the legs (33) having mounted on their ends, pontoons (14 via 12; the tires are inherently capable of floating)

Art Unit: 3672

As to claim 13, Wilderman discloses blow out preventer hangers (58, nipple is inherently capable of attachment to a blowout preventer).

As to claims 14 and 23, Andreychuk teaches use of the coiled tubing injector (70) having mounted there-below a lubricator for guiding the coiled tubing, wherein the lubricator is telescoping to selectively allow access to said coiled tubing (col. 9, lines 3-7).

Claims 16 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilderman, U.S. 3,734,210 in view of Andreychuk, U.S. 6,003,598 as applied to claim 1-15, 17-29, above, and further in view of Smith et al., U.S. 6,158,516.

As to claims 16 and 30, Wilderman in view of Andreychuk, discloses all the claimed limitations except for the drill rig or bottom hole assembling system adapted to selectively drill using coiled tubing and jointed pipe. Smith et al. teaches use of a drill rig or bottom hole assembling system adapted to selectively drill using coiled tubing and jointed pipe (col. 4, lines 10-14) to allow for continued drilling operations in the event of an equipment failure affecting one drill mode (col. 4, lines 15-26). It would have been obvious to one having ordinary skill in the art at the time of the invention to arrange for the rig or system disclosed by Wilderman and Andreychuk, to be adaptable for jointed or coil tubing drilling, as taught by Smith et al. to eliminate or reduce down time associated with equipment failure thereby reducing the overall cost to the customer.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3672

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by

Andreychuk, U.S. 2003/0098150 A1.

Regarding claim 1, Andreychuk discloses a base (12), a mast (30), a top drive (80) operable to engage and rotate downhole equipment, a coiled tubing injector (50) operable to move between a first position in which the injector the mast (fig 1a), to a second position in which tie injector is out of line with the mast (fig3a).

As to claim 16, Andreychuk discloses the rig adapted to selectively drill using coil tubingn and jointed pipe (paragraph 0071 and 0072).

Allowable Subject Matter

Claims 31-36 would be allowable if rewritten or amended to overcome the objections set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose or suggest all the claimed subject matter including the method of transposing the injector to the second position, sliding the top drive in spaced relation to the rotary table, placing a bottom element into the rotary table, operating the rotary table to engage the bottom element, placing a second element such that its upper end is adjacent to the top drive, operating the top drive to engage the second element, positioning the second element such that its lower end is adjacent to the upper end of the bottom element, rotating the second element or the bottom element relative to each other so as to screw the two

Art Unit: 3672

elements together, operating the top drive to disengage the second element, sliding the top drive along the mast to a position in spaced relation to the second element, sliding the top drive along the mast to a position above the coiled tubing injector, transposing the coiled tubing injector to its first position, operating the coiled tubing injector to move coiled tubing having a threaded end.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenn Thompson whose telephone number is 703 306-5760 or 571 272-7037 after 31 March 2005. The examiner can normally be reached on 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J Bagnell can be reached on 703 308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


11 March 2005

KT